

PATENT COOPERATION TREATY

PCT

NOTIFICATION CONCERNING
SUBMISSION OR TRANSMITTAL
OF PRIORITY DOCUMENT

(PCT Administrative Instructions, Section 411)

From the INTERNATIONAL BUREAU

To:

AJELLO, Michael, John
Urquhart-Dykes & Lord
Greg's Buildings
1 Booth Street
Manchester M2 4DU
United Kingdom

Date of mailing (day/month/year) 30 September 2002 (30.09.02)	
Applicant's or agent's file reference 0651533WO	IMPORTANT NOTIFICATION
International application No. PCT/GB02/03408	International filing date (day/month/year) 24 July 2002 (24.07.02)
International publication date (day/month/year) Not yet published	Priority date (day/month/year) 27 July 2001 (27.07.01)
Applicant ALPHA PACKAGING & DESIGN LIMITED et al	

1. The applicant is hereby notified of the date of receipt (except where the letters "NR" appear in the right-hand column) by the International Bureau of the priority document(s) relating to the earlier application(s) indicated below. Unless otherwise indicated by an asterisk appearing next to a date of receipt, or by the letters "NR", in the right-hand column, the priority document concerned was submitted or transmitted to the International Bureau in compliance with Rule 17.1(a) or (b).
2. This updates and replaces any previously issued notification concerning submission or transmittal of priority documents.
3. An asterisk(*) appearing next to a date of receipt, in the right-hand column, denotes a priority document submitted or transmitted to the International Bureau but not in compliance with Rule 17.1(a) or (b). In such a case, the attention of the applicant is directed to Rule 17.1(c) which provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.
4. The letters "NR" appearing in the right-hand column denote a priority document which was not received by the International Bureau or which the applicant did not request the receiving Office to prepare and transmit to the International Bureau, as provided by Rule 17.1(a) or (b), respectively. In such a case, the attention of the applicant is directed to Rule 17.1(c) which provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.

<u>Priority date</u>	<u>Priority application No.</u>	<u>Country or regional Office or PCT receiving Office</u>	<u>Date of receipt of priority document</u>
27 July 2001 (27.07.01)	0118329.2	GB	17 Sept 2002 (17.09.02)

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. (41-22) 740.14.35	Authorized officer Sébastien CLAVERI (Fax 338.87.40) Telephone No. (41-22) 338.83.38
--	--

From the INTERNATIONAL BUREAU

PCTNOTICE INFORMING THE APPLICANT OF THE
COMMUNICATION OF THE INTERNATIONAL
APPLICATION TO THE DESIGNATED OFFICES

(PCT Rule 47.1(c), first sentence)

To:

AJELLO, Michael, John
Urquhart-Dykes & Lord
Greg's Buildings
1 Booth Street
Manchester M2 4DU
ROYAUME-UNI

Date of mailing(day/month/year)
13 February 2003 (13.02.03)

Applicant's or agent's file reference
0651533WO

IMPORTANT NOTICE

International application No.
PCT/GB02/003408

International filing date(day/month/year)
24 July 2002 (24.07.02)

Priority date(day/month/year)
27 July 2001 (27.07.01)

Applicant

ALPHA PACKAGING & DESIGN LIMITED, et al

1. Notice is hereby given that the International Bureau has communicated, as provided in Article 20, the international application to the following designated Offices on the date indicated above as the date of mailing of this notice:

KP, KR, US

In accordance with Rule 47.1(c), third sentence, those Offices will accept the present notice as conclusive evidence that the communication of the international application has duly taken place on the date of mailing indicated above and no copy of the international application is required to be furnished by the applicant to the designated Office(s).

2. The following designated Offices have waived the requirement for such a communication at this time:

AE, AG, AL, AM, AP, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EA, EC, EE, EP, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OA, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW

The communication will be made to those Offices only upon their request. Furthermore, those Offices do not require the applicant to furnish a copy of the international application (Rule 49.1(a-bis)).

3. Enclosed with this notice is a copy of the international application as published by the International Bureau on 13 February 2003 (13.02.03) under No. WO 03/011700.

4. **TIME LIMITS for filing a demand for international preliminary examination and for entry into the national phase**

The applicable time limit for entering the national phase will, subject to what is said in the following paragraph, be **30 MONTHS** from the priority date, not only in respect of any elected Office if a demand for international preliminary examination is filed before the expiration of **19 months** from the priority date, but also in respect of any designated Office, in the absence of filing of such demand, where Article 22(1) as modified with effect from 1 April 2002 applies in respect of that designated Office. For further details, see *PCT Gazette* No. 44/2001 of 1 November 2001, pages 19926, 19932 and 19934, as well as the *PCT Newsletter*, October and November 2001 and February 2002 issues.

In practice, time limits other than the 30-month time limit will continue to apply, for various periods of time, in respect of certain designated or elected Offices. For regular updates on the applicable time limits (20, 21, 30 or 31 months, or other time limit), Office by Office, refer to the *PCT Gazette*, the *PCT Newsletter* and the *PCT Applicant's Guide*, Volume II, National Chapters, all available from WIPO's Internet site, at <http://www.wipo.int/pct/en/index.html>.

For filing a demand for international preliminary examination, see the *PCT Applicant's Guide*, Volume I/A, Chapter IX. Only an applicant who is a national or resident of a PCT Contracting State which is bound by Chapter II has the right to file a demand for international preliminary examination (at present, all PCT Contracting States are bound by Chapter II).

It is the applicant's sole responsibility to monitor all these time limits.

The applicant is hereby notified that, at the time of establishment of this Notice, the time limit under Rule 46.1 for making amendments under Article 19 has not yet expired and the International Bureau had received neither such amendments nor a declaration that the applicant does not wish to make amendments.

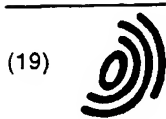
The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Authorized officer

Judith Zahra

Facsimile No.(41-22) 740.14.35

Telephone No.(41-22) 338.91.11



Europäisches Patentamt
European Patent Office
Office européen des brevets



(11) EP 0 857 661 A1

(12)

EUROPEAN PATENT APPLICATION

(43) Date of publication:
12.08.1998 Bulletin 1998/33

(51) Int Cl.⁶: B65D 43/16

(21) Application number: 98300927.5

(22) Date of filing: 09.02.1998

(84) Designated Contracting States:
AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC
NL PT SE
Designated Extension States:
AL LT LV MK RO SI

• Morley, Terence Colin
Bridgwater, Somerset TA6 7PA (GB)

(72) Inventor: Morley, Terence Colin
Bridgwater, Somerset TA6 7PA (GB)

(30) Priority: 08.02.1997 GB 9702596

(74) Representative: Claisse, John Anthony
John Claisse & Co.,
97 Portway
Wells, Somerset BA5 2BR (GB)

(71) Applicants:
• Baker, Martin Joseph
Bridgwater, Somerset TA5 2EA (GB)

(54) Moulded plastic container

(57) A moulded plastics container having a body portion (1) for containing a packaged article, a lid (2) connected to the body portion (1) for closing the body portion (1), and hinge means (8) connecting the body portion (1) to the lid (2), the body portion (1) having an outwardly extending flange (4) and a peripheral up-standing wall (6) around the opening of the body portion

(1), the hinge means (8) being attached to the peripheral wall (6) and comprising a first hinge (9), a second hinge (10), and a hinge extension (11) between the said first and second hinges (9 and 10), the hinge extension (11) being such that when the lid (2) is closed the periphery thereof substantially abuts the said flange (4) and thereby closes the body portion (1).

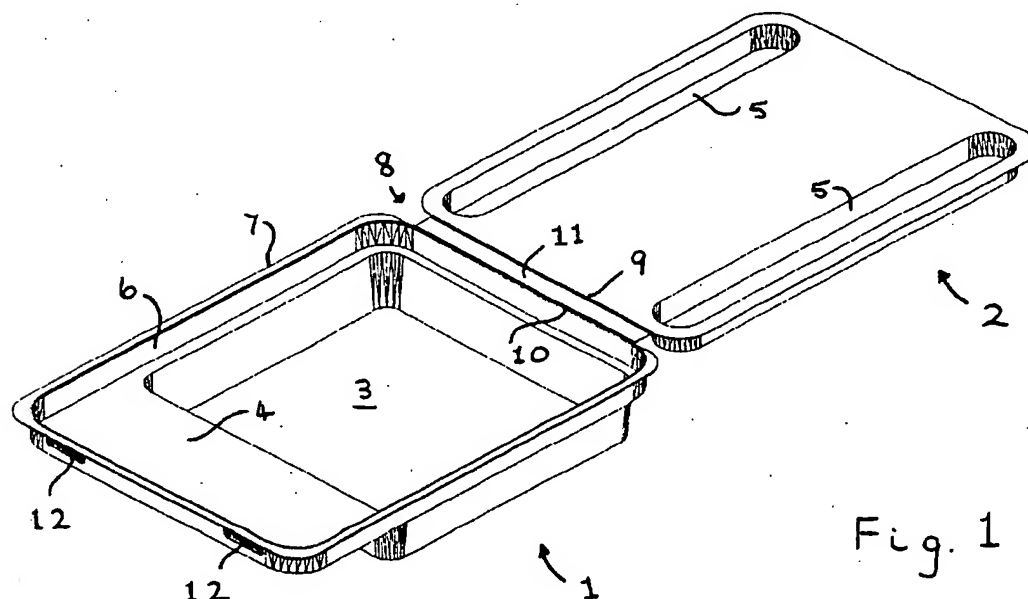


Fig. 1

EP 0 857 661 A1

Description

This invention concerns containers and more particularly moulded plastics containers having integral lids.

Plastics containers having integral lids are known in the packaging art, such containers usually being produced flat by moulding a plastics sheet in a suitable mould. The lid of the container is formed integral with the container body with a hinge in the plastics between them so that the container body can be closed by rotating the lid about the hinge.

Various securing means have been proposed for keeping the lids of such containers closed, for example strips of adhesive tape which merely hold them closed, and tabs and associated slots into which the tabs are inserted to hold the lids down. These methods of securing the lids of these containers are not totally satisfactory. For example, the flexible nature of the plastics used to form the containers can result in the mere weight of the contents of the closed containers forcing the lid open when tabs and slots are used as closures, and where adhesive tape is used for the purpose, the contents can merely flex the container body and/or the lid and thereby allow the contents to fall out of the container.

Apart from the mere inconvenience of having the contents of these containers falling out, there is the possibility of deliberate tampering with the contents of the containers. It is, of course, possible to prevent the contents of such containers falling out or being deliberately removed by securing the lid to the container body using a hot or cold seal adhesive around the outer edge of the lid. As will be appreciated, although this provides greater security for the container contents, it adds to the cost of the container and/or the packaging operation itself, particularly when a heat sealing operation has to be carried out. Furthermore, removal of the contents of the container when desired presents problems since the strong seals formed to prevent the contents being removed prematurely often themselves present difficulties since the packages in general have to be cut open to remove their contents.

According to the present invention there is provided a moulded plastics container having a body portion for containing a packaged article, a lid connected to the body portion for closing the body portion, and hinge means connecting the body portion to the lid, the body portion having an outwardly extending flange and a peripheral up-standing wall around the opening of the body portion, the hinge means being attached to the peripheral wall and comprising a first hinge, a second hinge, and a hinge extension between the said first and second hinges, the hinge extension being such that when the lid is closed the periphery thereof substantially abuts the said flange and thereby closes the body portion.

An embodiment of container in accordance with the present invention will now be described with reference to the accompanying diagrammatic drawings in which:-

Fig. 1 shows the container with its lid fully open and as moulded;

Fig. 2 shows the container of Fig. 1 with its lid partially closed;

Fig. 3 is similar to Fig. 2 but with the lid half closed and partially moved into a recess in the container;

Fig. 4 shows the lid of the container in its nearly closed position; and

Fig. 5 shows the container with its lid fully closed.

Referring to Fig. 1, the container has a body portion 1 for containing articles and an hinged lid 2 for closing the body portion 1. The body portion 1 has a recess 3 for articles to be packaged, and an outwardly extending flange 4 against which the lid 2 closes. The lid 2 has two longitudinal stiffeners 5 moulded into it so that the lid resists flexing and premature opening.

An upstanding wall 6 around the periphery of the flange 4 imparts rigidity to the body portion 1 and the associated flange 4, and it too has a peripheral flange 7 which in turn serves to impart stiffness to the wall 6.

The lid 2 is connected to the body portion 1 by an integral hinge assembly shown generally at 8. The hinge assembly 8, consists of a first hinge 9 which is formed along one edge of the lid 2 and a second hinge 10 which is formed along one edge of the wall 6, the first and second hinges 9, 10 being connected to each other by an extension piece 11. As will be described herein, the extension piece 11 spaces the first and second hinges 9, 10 apart by substantially the upstand of the wall 6.

Lid retaining means in the form of two nibs 12 extending inwardly of the wall 6 opposite the hinge assembly 8 serve to engage the end of the lid 2 remote from the hinge assembly 8 and resist opening of the lid 2 once it has been moved into its closed position.

Referring to Figs. 2 to 4, the container can be seen in various stages of closure of the lid 2. In Fig. 1 the lid 2 is approaching the vertical, pivoting of the lid 2 relative to the body portion 1 having taken place in a counter clockwise sense about hinge 10 of the hinge assembly 8. Further movement of the lid 2 to the position shown in Fig. 3 is not only in a counter clockwise sense about the hinge 10 but also in a clockwise sense about the hinge 9.

Continued closing of the lid 2 as shown in Fig. 4 also results in the lid 2 moving downwardly towards the flange 4 until it eventually reaches the fully closed position shown in Fig. 5, the end of the lid 2 remote from the hinge assembly 8 having engaged and been retained by the nibs 12. At this stage the hinge extension 11 has rotated in a counter clockwise sense through an angle of approximately 90° relative to the wall 6, and the lid 2 has rotated in a clockwise sense relative to the extension 11 through an angle of approximately 270°. As a

result, the lid 2 has become nested within the wall 6, and since the hinge extension 11 spaces the two hinges 9 and 10 apart by substantially the upstand of the wall 6, the periphery of the lid 2 now abuts the flange 4, thereby closing the recess 3.

Opening of the lid 2 is difficult since the lid 2 is held in place by the ribs 12 and it resists flexing as a result of the presence of the stiffeners 5, the periphery of the lid 2 being a close fit within the wall 6.

Claims

1. A moulded plastics container having a body portion for containing a packaged article, a lid connected to the body portion for closing the body portion, and hinge means connecting the body portion to the lid, the body portion having an outwardly extending flange and a peripheral up-standing wall around the opening of the body portion, the hinge means being attached to the peripheral wall and comprising a first hinge, a second hinge, and a hinge extension between the said first and second hinges, the hinge extension being such that when the lid is closed the periphery thereof substantially abuts the said flange and thereby closes the body portion.
2. A container according to claim 1, wherein the lid includes stiffener means for resisting flexing.
3. A container according to either of the preceding claims, including retaining means for retaining the lid in its closed position.

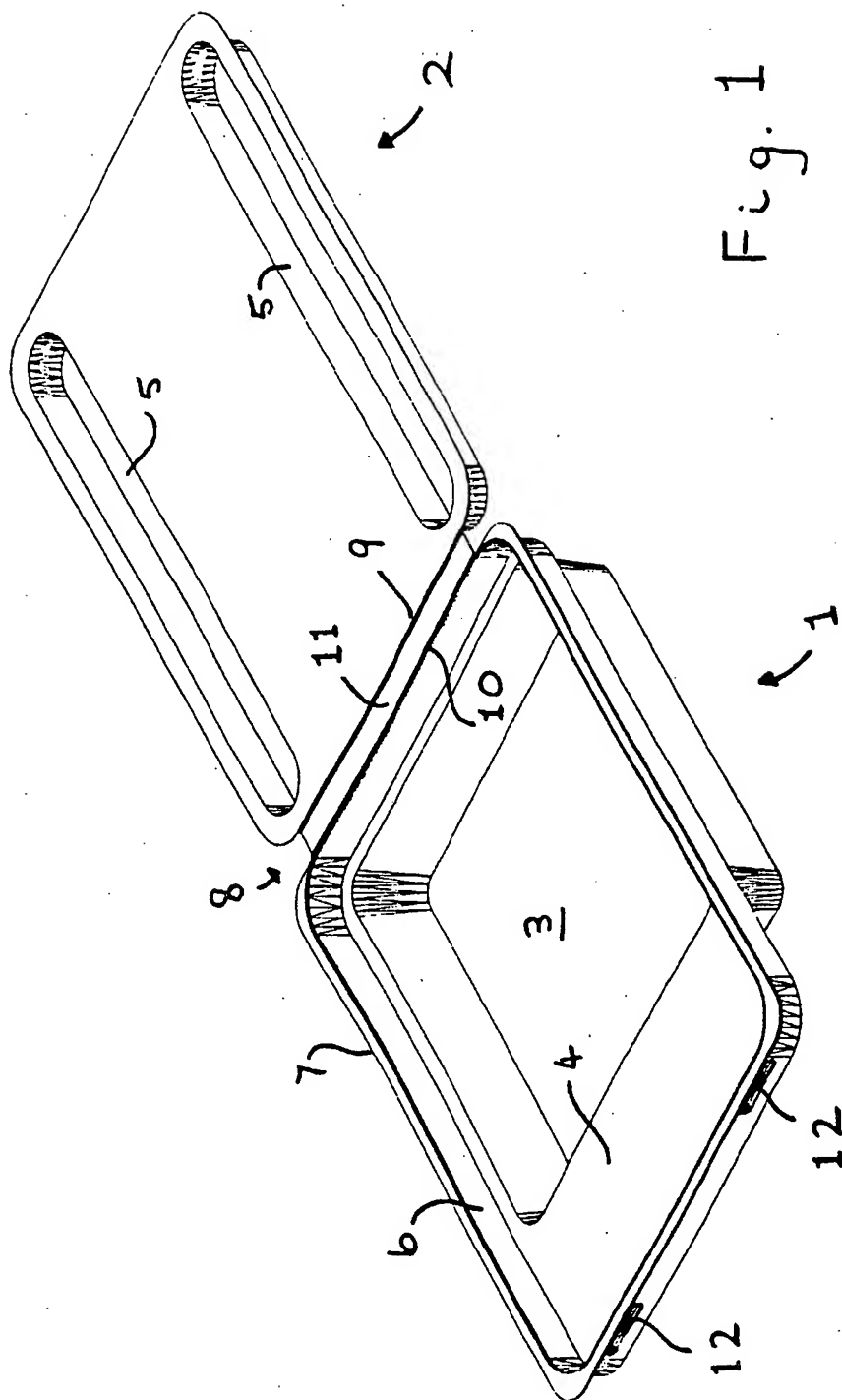
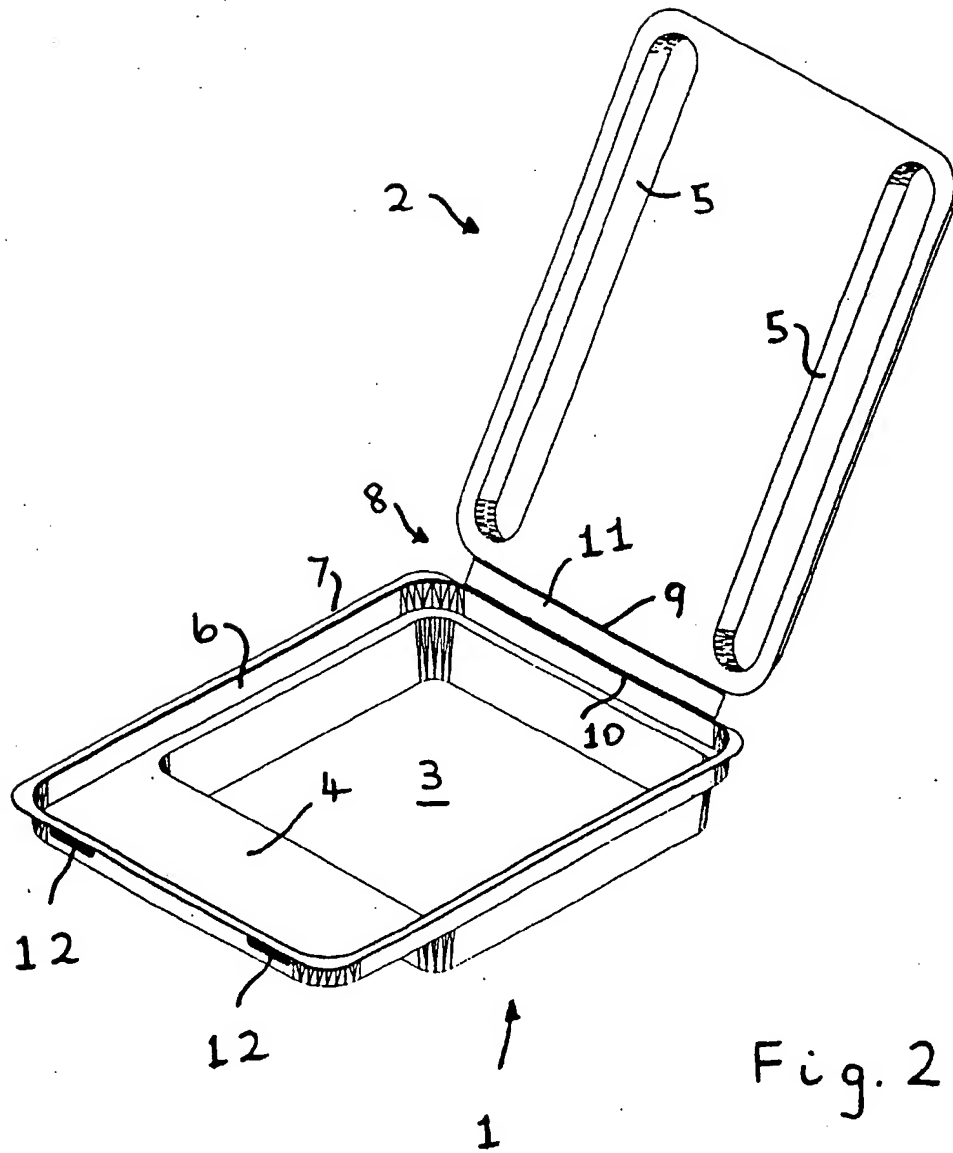


Fig. 1



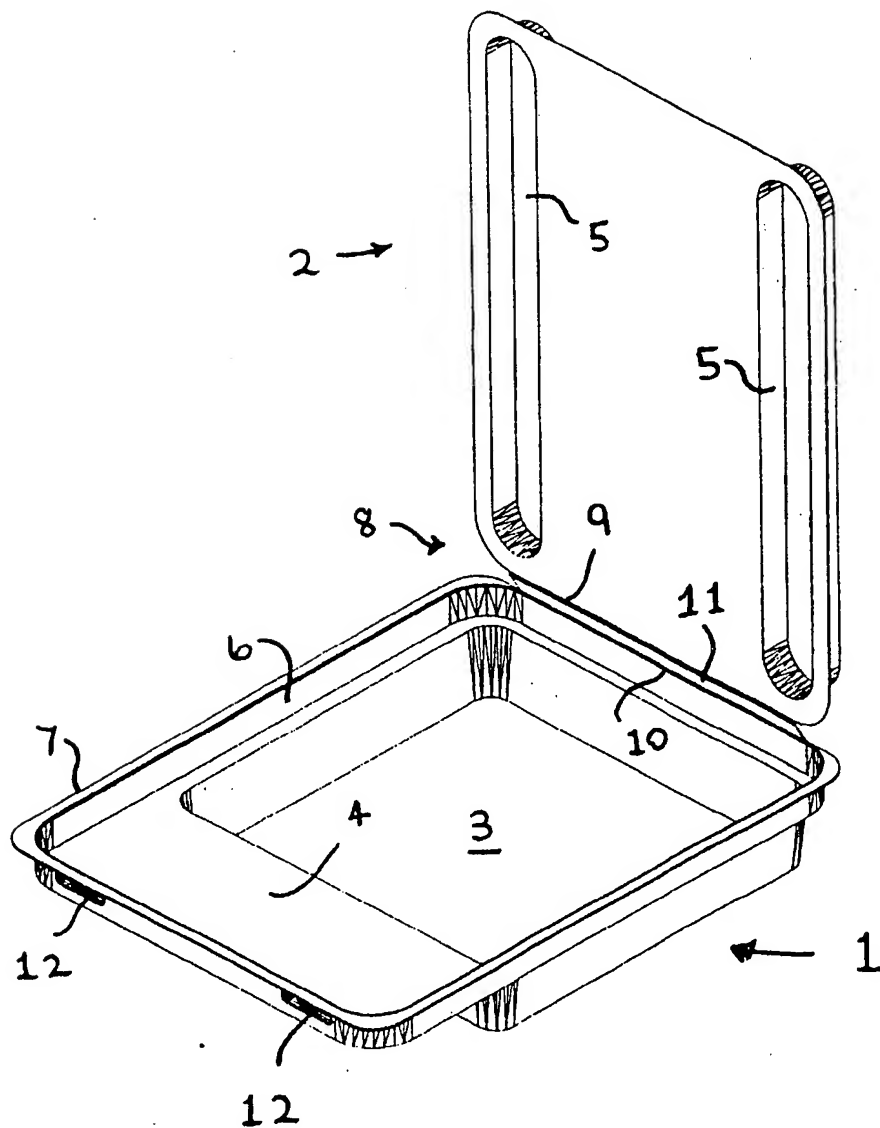


Fig. 3

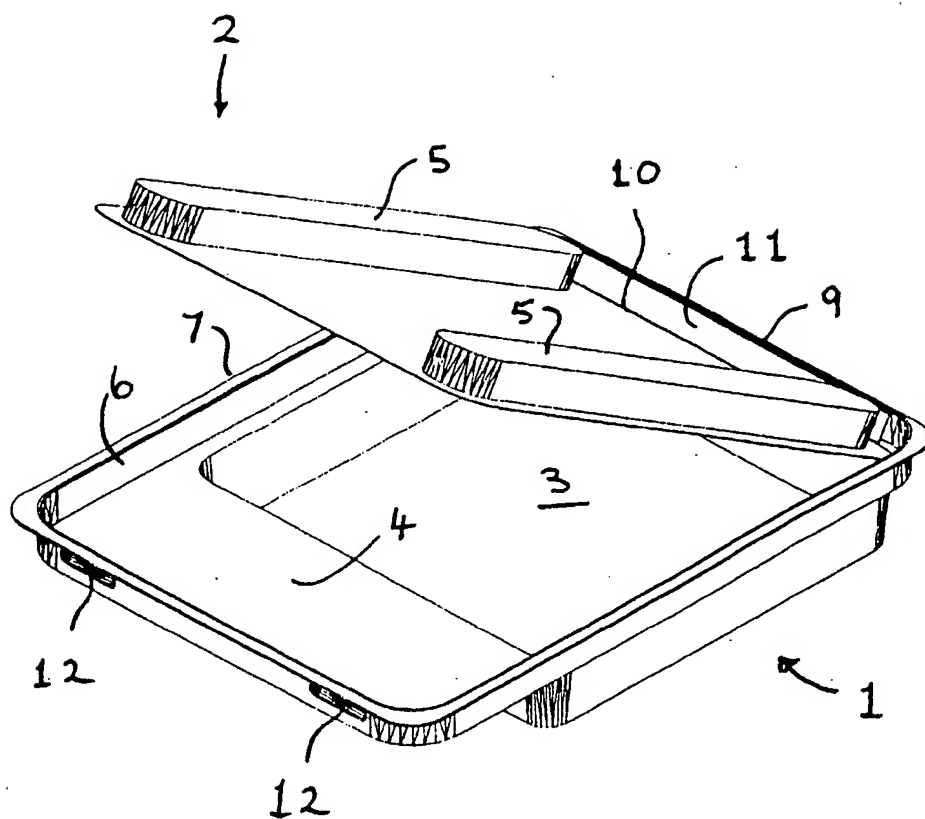


Fig. 4

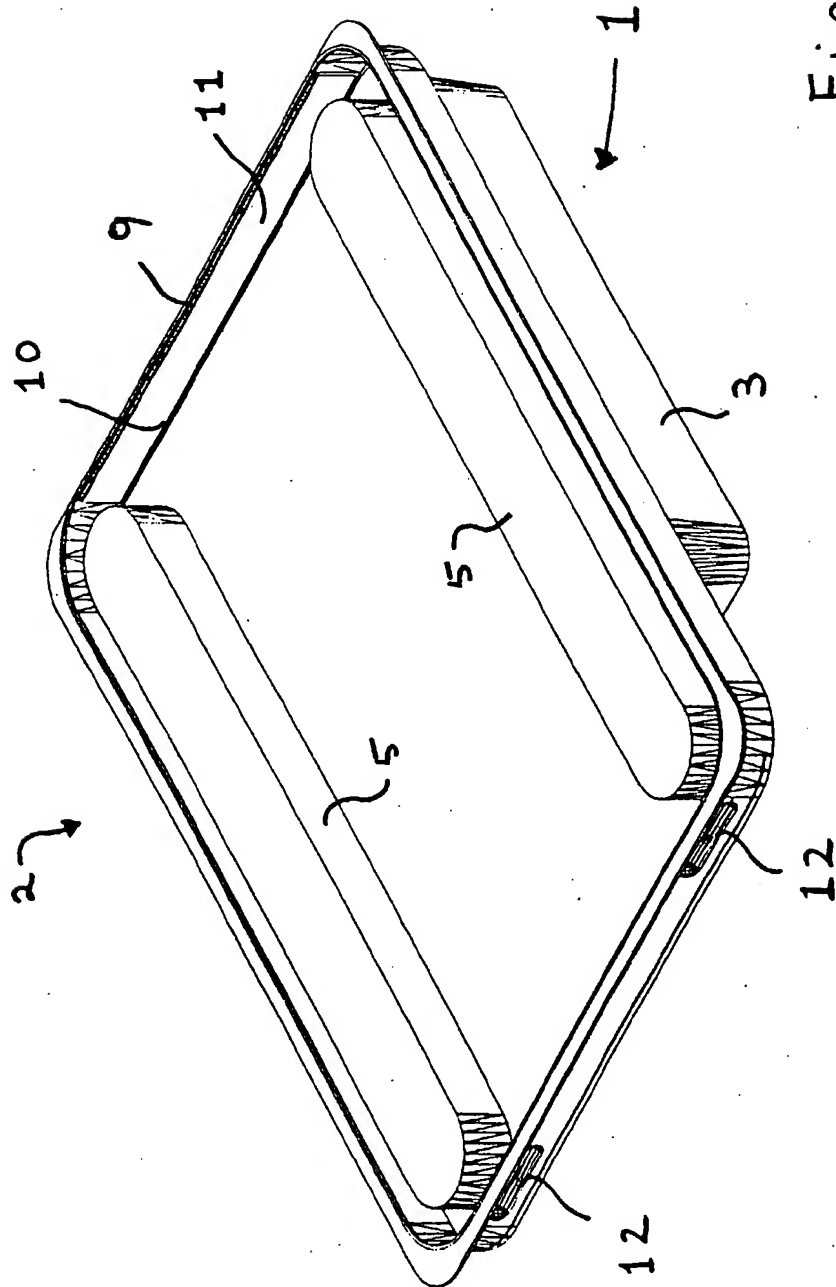


Fig. 5



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 98 30 0927

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
A	AU 14512 76 A (OMICRON PTY) * page 3, line 21 - page 4, line 19; figures 1-3 *	1,3	B65D43/16
A	US 5 209 354 A (NEWELL OPERATING CO) * column 6, line 21-43; figures 6,7 *	1	
A	EP 0 219 442 A (GUILLIN EMBALLAGES) * column 1, line 52 - column 3, line 32; figures 1-5 *	1,3	
A	WO 95 11834 A (ISAP OMV GROUP) * page 3, paragraph 4; figure 4 *	2	
A	US 4 453 666 A (INTERNATIONAL PAPER CO) * abstract; figure 3 *	1	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			B65D
Place of search THE HAGUE		Date of completion of the search 15 May 1998	Examiner Lenoir, C
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone ✓ : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>			

EPO FORM 1503 (03.92) (P4C01)